

**BEYER WEAVER & THOMAS, LLP**

INTELLECTUAL PROPERTY LAW

590 W. El Camino Real, Mountain View, CA 94040  
Telephone: (650) 961-8300 Facsimile: (650) 961-8301  
www.beyerlaw.com

**FACSIMILE COVER SHEET**

October 1, 2003

Receiver: **EXAMINER ERIC B. KISS**

TEL #: (703) 305-7737

FAX #: (703) 746-7240

Sender: R. Mahboubian

Our Ref. No.: SUNIP254

Re: **USSN 09/471,072**

Pages Including Cover Sheet(s):

12

**MESSAGE:**

- **NOT FOR ENTRY**
- **PLEASE DELIVER TO EXAMINER KISS**
- **REQUEST FOR TELEPHONE INTERVIEW**

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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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In re application of: Pelegri-Llopart and Cable

Attorney Docket No.: SUN1P254

Application No.: 09/471,072

Examiner: KISS, Eric B.

Filed: December 21, 1999

Group: 2122

Title: MECHANISM FOR AUTOMATIC  
SYNCHRONIZATION OF SCRIPTING  
VARIABLES

Confirmation No.: 6969

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**CERTIFICATE OF FACSIMILE TRANSMISSION**I hereby certify that this correspondence is being transmitted by facsimile  
to the U.S. Patent and Trademark Office on October 1, 2003.Signed: 

Sally Zumba

**APPLICANT INITIATED INTERVIEW REQUEST FORM**Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Tentative Participants: R. Mahboubian

Proposed Date of Interview:

Proposed Time: (AM/PM)

Type of Interview Requested:

☒ Telephone ☐ Personal ☐ Video ConferenceExhibit to be Shown or Demonstrated: ☐ Yes ☒ No

If yes, provide brief description:


**ISSUES TO BE DISCUSSED**

Issues (Rej., Obj., etc.)	Claims / Fig., #s	Prior Art	Discussed	Agreed	Not Agreed
1) 102 Rejection	Claims 1 and 7	Fussion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2) Objection to specification			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3) Objection to Fig. 2			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**BRIEF DESCRIPTION OF AGRUMENTS TO BE PRESENTED:**

Please see attached sheets

\*Note: This form should be completed by applicant and submitted to the examiner in advance of the interview (see MPEP §713.01). This application will not be delayed from issue because of applicant's failure to submit a written record of this interview. Therefore, applicant is advised to file a statement of the substance of this interview (37 C.F.R. 1.33(b)) as soon as possible.

  
\_\_\_\_\_  
(Applicant/Applicant's Representative)  
Signature)  
\_\_\_\_\_  
(Examiner/SPE Signature)

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Amendments to the Specification:

Please replace the paragraph which begins on page 1, line number 17, under the title "2. Description of the Related Art" with the following amended paragraph:

JAVA™ is a programming language expressly designed for use in the distributed environment of the Internet. It was designed to have the "look and feel" of the C++ language, but it is simpler to use than C++ and enforces an object-oriented programming model. JAVA™ can be used to create complete applications that may run on a single computer or be distributed among servers and clients in a network. It can also be used to build a small application module or applet for use as part of a Webpage. Applets make it possible for a Web page user to interact with the page. JAVASERVER™ Pages is the JAVA™ platform technology for building applications containing dynamic Web content such as HTML, DHTML, XHTML, and XML. A JAVASERVER™ Page (JSP) is a text-based document that describes how to process a request to create a response. The description inter-mixes template data with some dynamic actions, taking advantage of the capabilities of the JAVA™ platform. The template data is commonly fragments of a structured document (HTML, DHTML, XHTML or XML), and the dynamic actions can be described with scripting elements and/or server-side actiontags.

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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listings of Claims:

1. (Currently Amended) A computer system for automatic synchronization of scripting variables between a page including action tags and a tag library, the computer system comprising:

a page suitable for building an application with dynamic web content, the page including one or more action tags that are provided as text in a mark-up language;

a tag library;

a translator suitable for translating the action tags from the mark up language to an executable programming code that is executed at runtime to perform actions intended by the action tags;

a TagExtraInfo object for each action tag in the page, the TagExtraInfo object [including] providing a method that is accessed by the translator at translation time, the method [returns] returning, at translation time, information that includes a list of available scripting variables, and a variable type and scope associated with each scripting variable that is defined or modified by its associated action tag, thereby allowing the translator at translation time to use the information provided by the method to generate code that when executed at runtime will assign each of the scripting variables with appropriate runtime values with respect to the type and scope of each of the scripting variables;

a pageContext object for the page, the pageContext object including a runtime mapping of at least one scripting variable in the list of available scripting variables to a runtime value that is represented or can be represented in the tag library.

a tag handler that creates at runtime one or more objects that the page requires, the tag handler further operating to store the one or more created objects into the pageContext object; thereby allowing the one or more objects to be retrieved at runtime when the generated code is executed, the one or more objects being assigned at runtime to each of the scripting variables in the list of scripting variables that is returned by the method at translation time.

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~~thereby allowing synchronization of the at least one scripting variable between the page and the tag library by using the value provided in the mapping.~~

2. (Cancelled)

3. (Cancelled)

4. (Previously Presented) The computer system of Claim 3, wherein the TagExtraInfo object comprises:

- a valid object name for each variable;
- a type for each variable; and
- a scope parameter that specifies a variable's scope relative to the page.

5. (Cancelled)

6. (Previously Presented) The computer system of Claim 1, wherein the page is executed on a server that implements a container, and the page is converted to a platform independent code that is executed on the server.

7. (Currently Amended) A method for automatically synchronizing scripting variable between a page including one or more action tags and a tag library, the page suitable for building an application with dynamic web content, the one or more action tags being provided as text in a mark-up language which are translated at translation time to an executable code that is executed at runtime to synchronize the scripting variables at runtime, the method comprising:

instantiating, by a translator at translation time, for each action tag a TagExtraInfo object, the TagExtraInfo object providing a method that is accessed by the translator at translation time, the method capable of returning at translation time information that includes a list of available scripting variables and respectively associated variable types and scopes for each of the scripting variables in the list of available scripting variables, each of the scripting variables being defined or modified by an associated action tag;

invoking the method by a translator at translation time, wherein the invoking operates to pass a list of attributes associated with the one or more action tags;

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receiving, as a result of the invoking of the method, a collection of returned TagExtraInfo objects, wherein each of the returned TagExtraInfo objects includes an available scripting variable, its variable type, and its scope in the page;

generating by the translator, based on the returned TagExtraInfo objects, executable code that is executed at runtime, wherein the executable code accesses at runtime data that will be stored in a pageContext object at runtime, the runtime data including appropriate runtime values for each of the available scripting variables;

storing at runtime, into the pageContext object, by a tag handler at runtime, one or more objects that the page requires, thereby allowing the objects for the one or more objects to be retrieved at runtime and be assigned at runtime to the list of scripting variables;

executing, at run time, the code generated by the translator to assign appropriate runtime values which are stored in the pageContext object to each of the scripting variables in the returned TagExtraInfo objects, thereby allowing the runtime values to be retrieved and assigned at runtime to each of the available scripting variables in the collection of returned TagExtraInfo objects.

~~A method for automatically synchronizing scripting variables between a page including one or more action tags and a tag library, the method comprising:~~

- ~~—— creating for each action tag included in the page a TagExtraInfo object that includes a list of available scripting variables and a variable type associated with each scripting variable that is defined or modified by its associated action tag;~~
- ~~—— translating the page by referring to the list of scripting variables in the TagExtraInfo object associated with each action tag in the page;~~
- ~~—— executing the page;~~
- ~~—— creating for the page at execution, a pageContext object that includes a mapping of scripting variables to values that are or can be represented in the tag library; and~~
- ~~—— synchronizing the scripting variables between the page and the tag library by using the values that are provided in the mapping of the PageContext object.~~

8. (Previously Presented) The method of Claim 7, wherein the TagExtraInfo object comprises:

- a valid object name for each variable;
- a type for each variable; and
- a scope parameter that specifies a variable's scope relative to the page.

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REMARKS/ARGUMENTS

Claims 2 and 3 have been cancelled. The subject matter of the cancelled claims 2 and 3 has been incorporated in claim 1. In addition, claim 1 has been amended to further clarify the subject matter regarded as the invention. Similar to claim 1, claim 13 has been amended to incorporate features of cancelled claims 2 and 3 and has been further clarified. Claim 7 has also been amended to further clarify the subject matter regarded as the invention. These clarifications are supported, for example, by paragraphs 12, 13 and 28-39. Claims 1-4, 6-8, 10 and 13-18 are now pending.

Objection to the Drawings

In the Office Action, the Examiner objected to Fig. 2. A proposed formal drawing of Fig. 2 has been submitted for Examiner's approval. Fig. 2 illustrates a simple example of a JSP. As noted in the specification, the example shows the response page, which is intended to be a short list of the day of the month and year, at the moment the request is received by the server. The page itself contains some fixed template text, and JSP elements that are shown underlined in the figure. The underlined actions are executed on the server side. When a client makes a request, such as an HTTP request, a request object requests a response from the JAVASERVER™ container. The first element creates a JAVA™ Bean named clock, of type calendar.jspCalendar. The next two elements use the Bean to display some of its properties (i.e. month and year). The output is sent to a response object which sends a response back to the client.

A JSP page is executed by a JSP container, which is installed on a Web server, or on a Web enabled application server. The JSP container delivers requests from a client to a JSP page and responses from the JSP page to the client. JSP pages may be implemented using a JSP translation or compilation phase that is performed only once, followed by a request processing phase that is performed once per request. The translation phase creates a JSP page implementation class that implements a servlet interface.



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Typically, a JSP page contains declarations, fixed template data, action instances that may be nested, and scripting elements. When a request is delivered to a JSP page, all these components are used to create a response object that is then returned to the client. As with standard Web pages, JSP pages may contain "tags." A tag is a textual element within a document that provides instructions for formatting or other actions. For example, World Wide Web documents are set up using HTML (Hyper-Text Mark-up Language) tags which serve various functions such as controlling the styling of text and placement of graphic elements, and also providing links to interactive programs and scripts. (Specification, paragraph 4-7.)

It is respectfully requested that Fig. 2 illustrates the interaction between the client and a JSP page that is running in a container. Accordingly, it is respectfully requested that the Examiner withdraw this objection.

#### Objection to the Specification

As suggested by the Examiner, the trademark Java has been accompanied by generic terminology. As is known in the art, JAVA™ is a programming language expressly designed for use in the distributed environment of the Internet. It was designed to have the "look and feel" of the C++ language, but it is simpler to use than C++ and enforces an object-oriented programming model. Java can be used to create complete applications that may run on a single computer or be distributed among servers and clients in a network. It can also be used to build a small application module or applet for use as part of a Webpage. Applets make it possible for a Web page user to interact with the page. Accordingly, it is respectfully requested that the Examiner withdraw this objection to the specification.

#### Rejection of claims

Although the Examiner withdrew the rejection of claims under 35 U.S.C. §101 and U.S.C. §102 (b), the Examiner has maintained some or all rejections under 35 U.S.C. §112, 35 U.S.C. §102 (b), and 35 U.S.C. §103. Claims have been amended to

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further clarify the subject matter regarded as the invention. It is respectfully requested that the Examiner withdraw the rejections under 35 U.S.C. §112.

In the Office Action, the Examiner has rejected claims 1-4, 7, 8, 13-15, 17 and 18 under 35 U.S.C. §102(a) as being anticipated by ColdFusion 4.0 software product documents. In doing so, the Examiner has asserted that the ColdFusion 4.0 software product, developing web applications with ColdFusion ("CFSET"), teaches a pageContext object for the page that includes a mapping of scripting variables to values. The Applicant respectfully reiterates the arguments previously submitted and maintains that CFSET's discussion of creation and use of variables in a page does not teach a pageContext object for the page that includes a mapping of scripting variables to values in the context of the invention.

Furthermore, it is respectfully submitted that *CF Advanced* and *CFSET* fails to teach a TagExtraInfo object for each action tag in the page, the TagExtraInfo object providing a method that is accessed by the translator at translation time, the method returning, at translation time, information that includes a list of available scripting variables, and a variable type and scope associated with each scripting variable that is defined or modified by its associated action tag. This allows the translator, at translation time, to use the information provided by the method to generate code that when executed at runtime will assign each of the scripting variables with appropriate runtime values with respect to the type and scope of each of the scripting variables. It should be noted that *CF Advanced* and *CFSET* do not teach translation of a page to executable code in the context of the invention. Thus, it earnestly believed that there is no teaching or suggestion in *CFSET* or *CF Advanced* with respect to these features. In addition, *CFSET* or *CF Advanced* do not teach or suggest a translator suitable for translating the action tags from the mark up language to an executable programming code that is executed at runtime to perform actions intended by the action tags.

Still Further, *CF Advanced* and *CFSET* do not teach a tag handler that creates at runtime one or more objects than the page requires. It should be noted that the tag handler further operates to store the one or more created objects into the pageContext object. This allows the one or more objects to be retrieved at runtime when the generated code (generated at translation time) is executed. The one or more objects are assigned at runtime to the variables in the list of scripting variables that is returned by the method at translation time. Accordingly, it is respectfully submitted that claim 1

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and its dependent claims are patentable for at least these reasons. Furthermore independent 14 recite similar features as those recited in claim 1. Therefore, it is respectfully submitted that claim 14 and its dependent claims are patentable over the cited art for similar reasons.

Claim 7 recites the operations of: instantiating by a translator at translation time for each action tag a TagExtraInfo object, invoking the method by a translator at translation time, receiving as a result of the invoking of the method a collection of returned TagExtraInfo objects, generating by the translator, based on the returned TagExtraInfo objects, executable code that is executed at runtime, wherein the executable code accesses at runtime data that will be stored in a pageContext object at runtime, the runtime data including appropriate runtime values for each of the available scripting variables, storing at runtime, into the pageContext object, by a tag handler at runtime, one or more objects that the page requires. This allows the runtime values to be retrieved and assigned at runtime to each of the available scripting variables in the collection of returned TagExtraInfo objects. It is respectfully submitted that *CF Advanced* and *CFSET* do not teach these features.

Based on the foregoing, it is submitted that all pending claims are patentably distinct over the cited art of record. Additional limitations recited in the independent claims or the dependent claims are not further discussed as the above-discussed limitations are clearly sufficient to distinguish the claimed invention from the cited art. Accordingly, it is respectfully requested that the Examiner withdraw all rejections.

Applicant believes that all pending claims are allowable and respectfully requests a Notice of Allowance for this application from the Examiner. Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at the telephone number set out below.

If there are any issues remaining which the Examiner believes could be resolved through either a Supplemental Response or an Examiner's Amendment, the Examiner is respectfully requested to contact the undersigned attorney at the telephone number listed below.

Applicants hereby petition for an extension of time which may be required to maintain the pendency of this case, and any required fee for such extension or any

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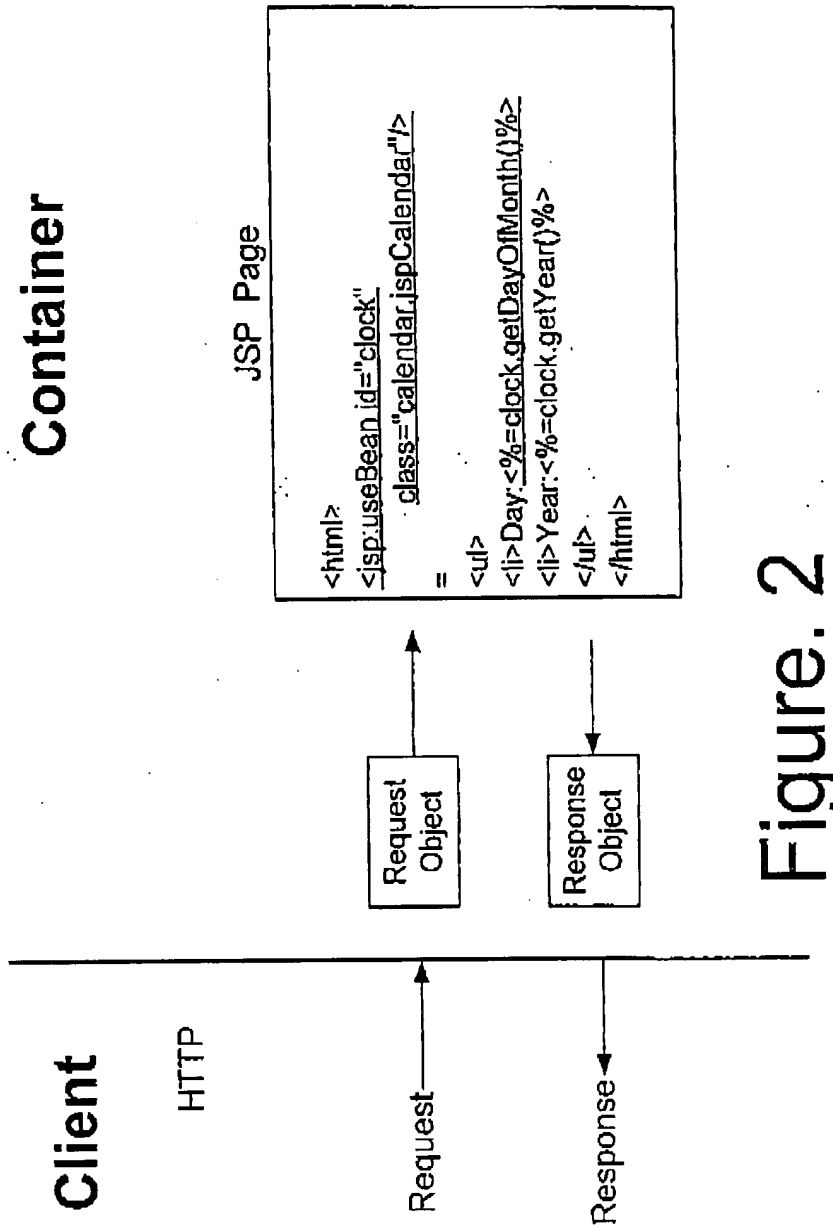


Figure. 2